CLAIMS

What is claimed is:

1. A method for obtaining metadata for a media content file storing media content, said media content file being stored on a computer-readable medium, said method comprising:

requesting metadata for the media content file from a metadata provider via a request data structure, said request data structure comprising a request type identifier defining a type for the computer-readable medium, a request identifier, and one or more metadata elements stored with the media content file; and

receiving a return data structure from the metadata provider, said return data structure storing a return type identifier defining the type for the computer-readable medium, the request identifier, and return metadata corresponding to the requested metadata.

2. The method of claim 1, wherein the return metadata comprises metadata determined by the metadata provider to be associated with the media content file.

3. The method of claim 1, wherein the request type identifier comprises MDQ-CD or MDQ-DVD.

4. The method of claim 1, wherein the return type identifier comprises MDR-CD or MDR-DVD.

5. The method of claim 1, wherein the type relates to at least one of the following: a compact disc, a digital versatile disc, and flash memory.

6. The method of claim 1, wherein the computer-readable medium comprises one or more of the following: a compact disc, a digital versatile disc, and flash memory.

7. The method of claim 1, wherein the metadata provider comprises a human or a computer.

8. The method of claim 1, wherein the return data structure comprises a delay time interval, and further comprising postponing additional requests for metadata until after the delay time interval has elapsed.

9. The method of claim 1, further comprising:

associating the return metadata or a portion thereof with namespace identifiers including at least one of WMContentID, WMCollectionID, and WMCollectionGroupID; and

storing the namespace identifiers and associated metadata with the media content file.

10. The method of claim 9, wherein the return metadata comprises a globally unique identifier.

11. The method of claim 1, further comprising classifying the media content with namespace identifiers including at least one of WMPrimaryClassID and WMSecondaryClassID.

12. The method of claim 1, further comprising associated the return metadata or a portion thereof with a namespace identifier representing a box set identifier.

13. The method of claim 1, wherein the metadata elements in the request data structure comprise values associated with namespace identifiers including at least one of WMContentID, WMCollectionID, WMCollectionGroupID, WMPrimaryClassID, and WMSecondaryClassID, wherein the values and namespace identifiers are stored in the media content file.

14. The method of claim 13, wherein requesting the metadata comprises requesting the metadata from at least one of the following: a local cache, a network server, and a client computer.

15. The method of claim 1, wherein the media content file comprises one of a plurality of songs in an album, wherein requesting the metadata comprises requesting metadata for the song, and wherein the return metadata comprises metadata for the plurality of songs in the album.

16. The method of claim 1, further comprising storing the return metadata in a cache.

17. The method of claim 1, further comprising storing the return metadata with the media content file.

18. The method of claim 1, further comprising requesting additional metadata from the metadata provider using a portion of the return metadata.

19. The method of claim 1, wherein requesting the metadata comprises formulating a network address with one or more query string parameters, said formulated network address representing the request data structure.

20. The method of claim 1, wherein the network address comprises a uniform resource locator.

21. The method of claim 1, wherein the metadata provider performs:
receiving the request data structure from a computing device;
searching for the requested metadata in a database based on the received metadata elements;
ranking the results of said searching;

correlating the ranked results with a table storing metadata to identify the requested metadata;

　　　populating the return data structure with the identified metadata; and

　　　sending the populated return data structure to the computing device.

22.　One or more computer-readable media having computer-executable instructions for performing the method of claim 1.

23.　A method comprising:

determining an identifier value;

associating the determined identifier value with media content; and

assigning the determined identifier value to one or more of the following fields: WMContentID, WMCollectionID, WMCollectionGroupID, WMPrimaryClassID, and WMSecondaryClassID; and

　　　storing the identifier value and assigned fields with the media content.

24.　The method of claim 23, wherein the identifier value comprises a globally unique identifier.

25.　The method of claim 23, wherein the identifier value comprises a class or type for the media content.

26.　The method of claim 23, wherein determining the identifier value comprises generating the identifier value.

27.　The method of claim 23, wherein associating the determined identifier value comprises populating a reference table.

28.　One or more computer-readable media having computer-executable instructions for performing the method of claim 23.

29. One or more computer-readable media having computer-executable components for obtaining metadata for a media content file storing media content, said media content file being stored on a computer-readable medium, said components comprising:

a query component for requesting metadata for the media content file from a metadata provider via a request data structure, said request data structure comprising a request type identifier defining a type for the computer-readable medium, a request identifier, and one or more metadata elements stored with the media content file; and

an interface component for receiving a return data structure from the metadata provider in response to the request sent by the query component, said return data structure storing a return type identifier defining the type for the computer-readable medium, the request identifier, and return metadata corresponding to the requested metadata.

30. The computer-readable media of claim 29, wherein the return metadata comprises metadata determined by the metadata provider to be associated with the media content file.

31. The computer-readable media of claim 29, wherein the request type identifier comprises MDQ-CD or MDQ-DVD.

32. The computer-readable media of claim 29, wherein the return type identifier comprises MDR-CD or MDR-DVD.

33. The computer-readable media of claim 29, further comprising an authoring component for:

associating the return metadata or a portion thereof with namespace identifiers including at least one of WMContentID, WMCollectionID, and WMCollectionGroupID; and

storing the namespace identifiers and associated metadata with the media content file.

34. The computer-readable media of claim 33, wherein the authoring component further classifies the media content using other namespace identifiers including at least one of WMPrimaryClassID and WMSecondaryClassID.

35. The computer-readable media of claim 33, wherein the authoring component further comprises:

determining an identifier value;

associating the determined identifier value with media content; and

assigning the determined identifier value to one or more of the following namespace identifiers: WMContentID, WMCollectionID, and WMCollectionGroupID; and

storing the identifier value and assigned namespace identifiers with the media content.

36. The computer-readable media of claim 29, wherein the metadata elements in the request data structure comprise values associated with namespace identifiers including at least one of WMContentID, WMCollectionID, WMCollectionGroupID, WMPrimaryClassID, and WMSecondaryClassID, wherein the values and namespace identifiers are stored in the media content file.

37. A media player comprising computer-executable instructions for obtaining metadata for a media content file, said media content file being stored on a computer-readable medium, said instructions comprising:

requesting metadata for the media content file from a metadata provider via a request data structure, said request data structure comprising a request type identifier defining a type for the computer-readable medium, a request identifier, and one or more metadata elements stored with the media content file; and

receiving a return data structure from the metadata provider, said return data structure storing a return type identifier defining the type for the computer-readable

medium, the request identifier, and return metadata corresponding to the requested metadata.

38.  The media player of claim 37, wherein the instructions further comprise classifying the media content file based on the return metadata.

39.  The media player of claim 37, wherein the return data structure comprises a delay time interval, and wherein the instructions further comprise postponing additional requests for metadata until after the delay time interval has elapsed.

40.  The media player of claim 37, wherein the instructions further comprise:
associating the return metadata or a portion thereof with namespace identifiers including at least one of WMContentID, WMCollectionID, WMCollectionGroupID; and
storing the namespace identifiers and associated metadata with the media content file.

41.  The media player of claim 37, wherein the instructions further comprise classifying the media content using other namespace identifiers including at least one of the following:  WMPrimaryClassID and WMSecondaryClassID.

42.  The media player of claim 37, wherein the instructions further comprise:
determining an identifier value;
associating the determined identifier value with media content; and
assigning the determined identifier value to one or more of the following namespace identifiers:  WMContentID, WMCollectionID, and WMCollectionGroupID; and
storing the identifier value and assigned fields with the media content.

43.  A computer-readable medium having stored thereon a data structure representing a request for metadata, said data structure for transmission by a first

computing device to a second computing device to request metadata for media content, said data structure comprising:

a request type identifier defining a type for a destination computer-readable medium storing the media content;

a request identifier; and

one or more metadata elements stored with the media content.

44. The computer-readable medium of claim 43, wherein the request type identifier comprises MDQ-CD or MDQ-DVD.

45. The computer-readable medium of claim 43, wherein the type relates to at least one of the following: a compact disc, a digital versatile disc, and flash memory.

46. The computer-readable medium of claim 43, wherein the destination computer-readable medium comprises one or more of the following: a compact disc, a digital versatile disc, and flash memory.

47. A computer-readable medium having stored thereon a data structure sent from a first computing device to a second computing device in response to a request for metadata sent by the second computing device, said data structure comprising:

a return type identifier defining a type for a destination computer-readable medium storing the media content;

a request identifier; and

return metadata corresponding to the requested metadata.

48. The computer-readable medium of claim 47, wherein the request type identifier comprises MDR-CD or MDR-DVD.

49. The computer-readable medium of claim 47, further comprising a delay interval specifying a time period for postponing additional requests for metadata by the second computing device.

50. The computer-readable medium of claim 47, wherein the type relates to at least one of the following: a compact disc, a digital versatile disc, and flash memory.

51. A computer-readable medium having stored thereon a data structure representing a namespace for identifying media content, said data structure comprising:

a first field storing a content identifier value, said first field having a label of WMContentID;

a second field storing a collection identifier value, said second field having a label of WMCollectionID; and

a third field storing a group identifier value, said third field having a label of WMCollectionGroupID.

52. The computer-readable medium of claim 51, wherein said first, second, and third fields represent different levels of granularity for identifying the media content.

53. The computer-readable medium of claim 51, wherein the content identifier value, the collection identifier value, and the group identifier value each comprise a globally unique identifier.

54. The computer-readable medium of claim 51, wherein the third field represents a box set identifier.

55. A computer-readable medium having stored thereon a data structure representing a namespace for classifying media content, said data structure comprising:

a first field storing a primary identifier value, said first field having a label of WMPrimaryClassID; and

a second field storing a secondary identifier value, said second field having a label of WMSecondaryClassID.

56. The computer-readable medium of claim 55, wherein said first and second fields represent different levels of granularity for classifying the media content.

57. The computer-readable medium of claim 55, wherein the primary identifier value and the secondary identifier value each comprise at least one of the following: audio, video, and other.

58. The computer-readable medium of claim 55, wherein the primary identifier value and the secondary identifier value each comprise a globally unique identifier.

59. A computer-readable file storing:

media content;

one or more of the following identifiers characterizing the media content: WMContentID, WMCollectionID, WMCollectionGroupID, WMPrimaryClassID, and WMSecondaryClassID; and

an identifier value associated with each of the one or more identifiers.

60. The computer-readable file of claim 59, wherein the identifier value for WMContentID, WMCollectionID, and WMCollectionGroupID comprises a globally unique identifier.

61. The computer-readable file of claim 59, wherein the identifier value for WMPrimaryClassID and WMSecondaryClassID comprises one of the following: audio, video, or other.

62. The computer-readable file of claim 59, wherein the following identifiers represent increasing levels of granularity for classifying the media content: WMCollectionGroupID, WMCollectionID, and WMContentID.

63. The computer-readable file of claim 59, wherein the following identifiers represent increasing levels of granularity for identifying the media content: WMPrimaryClassID and WMSecondaryClassID.

64. A method for obtaining metadata for media content, said media content being stored on a computer-readable medium, said method comprising:

formulating a network address with a query string parameter, said query string parameter comprising an identifier and a value associated therewith, said identifier or a portion thereof comprising the text string WMID, said associated value corresponding to the media content.

65. The method of claim 64, wherein the formulated network address comprises a uniform resource locator.

66. The method of claim 64, further comprising:

requesting metadata for the media content file from a metadata provider via the formulated network address; and

receiving a return data structure from the metadata provider, said return data structure storing a return type identifier defining a type for the computer-readable medium, a request identifier, and return metadata corresponding to the requested metadata.

67. The method of claim 64, further comprising another query string parameter, said query string parameter comprising another identifier and another value associated therewith, said other identifier comprising one or more of the following: VERSION, LOCALE, and REQUESTID.

68. A method for obtaining metadata for media content, said media content being stored on a computer-readable medium, said method comprising:

formulating a network address with a query string parameter, said query string parameter comprising an identifier and a value associated therewith, said identifier or a

portion thereof comprising the text string CD, said associated value corresponding to the media content.

69. The method of claim 68, wherein the formulated network address comprises a uniform resource locator.

70. The method of claim 68, further comprising:

requesting metadata for the media content file from a metadata provider via the formulated network address; and

receiving a return data structure from the metadata provider, said return data structure storing a return type identifier defining a type for the computer-readable medium, a request identifier, and return metadata corresponding to the requested metadata.

71. The method of claim 68, further comprising another query string parameter, said query string parameter comprising another identifier and another value associated therewith, said other identifier comprising one or more of the following: VERSION, LOCALE, and REQUESTID.

72. A method for processing media content, said method comprising:

receiving a request for metadata, said metadata being associated with media content, said request comprising one or more metadata elements;

searching for the requested metadata in a database based on the received metadata elements;

ranking the results of said searching; and

correlating the ranked results with a table to identify the requested metadata.

73. The method of claim 72, wherein searching for the requested metadata comprises searching the database based on the metadata elements collectively.

74. The method of claim 72, wherein ranking the results comprises assigning a weighting to each of the results based on the searching method and received metadata elements.

75. One or more computer-readable media having computer-executable instructions for performing the method of claim 72.